

**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Patent No.: US 7,283,680 B2      Date of Patent: 10/16/2007  
5 Inventors : Tzu-Hung Cheng  
Examiner: Smith, Jeffrey S  
Filing Date: 09/17/2003      Art Unit: 2624  
App. No.: 10/605,250      Docket No.: PMXP0159USA

10 Title: METHOD FOR IMAGE PROCESSING BY UNSHARP MASKING

To: Commissioner for Patents  
P.O. BOX 1450  
Alexandria, VA 22313-1450

15

Subject: Status Inquiry about Certificate of Correction

Dear Sir,

20      The applicant submitted a request for Certificate of Correction of Office Mistake  
on 11/14/2007 (Attachment 1) and the document also showed on public PAIR  
(Attachment 2). But the applicant never received the certificate of correction so far.  
Please send the certificate of correction to the applicant as soon as possible. Thank  
you.

25

30

Sincerely yours,

Winston Hsu

Date: 09.02.2008

Winston Hsu, Patent Agent No. 41,526

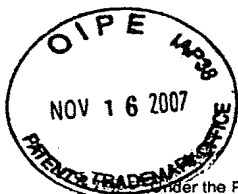
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- 10 Note: Please leave a message in my voice mail if you need to talk to me. (The time in D.C. is 12 hours behind the Taiwan time, i.e. 9 AM in D.C. = 9 PM in Taiwan.)



Attachment 1

JFW

PTO/SB/21 (10-07)

Approved for use through 10/31/2007. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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**TRANSMITTAL  
FORM**

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

9

Application Number

10/605,250

Filing Date

09/17/2003

First Named Inventor

Tzu-Hung Cheng

Art Unit

2624

Examiner Name

Smith, Jeffrey S

Attorney Docket Number

PMXP0159USA

**ENCLOSURES (Check all that apply)**

Fee Transmittal Form



Fee Attached



Amendment/Reply



After Final



Affidavits/declaration(s)



Extension of Time Request



Express Abandonment Request



Information Disclosure Statement



Certified Copy of Priority Document(s)

Reply to Missing Parts/  
Incomplete ApplicationReply to Missing Parts  
under 37 CFR 1.52 or 1.53

Drawing(s)



Licensing-related Papers



Petition

Petition to Convert to a  
Provisional Application

Power of Attorney, Revocation



Change of Correspondence Address



Terminal Disclaimer



Request for Refund



CD, Number of CD(s) \_\_\_\_\_

☐ Landscape Table on CD

After Allowance Communication to TC

Appeal Communication to Board  
of Appeals and InterferencesAppeal Communication to TC  
(Appeal Notice, Brief, Reply Brief)

Proprietary Information



Status Letter

Other Enclosure(s) (please identify  
below):

1. A copy of the Front Page of Patent
2. Copies of the Filing Receipt
3. A copy of the Foreign Priority data showed  
on public PAIR
4. The Form of PTO/SB/44

Remarks

Request for Certificate of Correction of Office Mistake

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm Name

North America Intellectual Property Corporation

Signature

*Winston Hsu*

Printed name

Winston Hsu

Date

NOV 14 2007

Reg. No.

41,526

**CERTIFICATE OF TRANSMISSION/MAILING**

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

Signature

*Stephanie Lai*

Typed or printed name

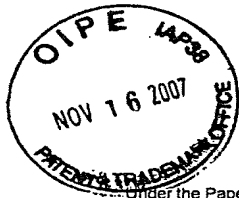
Stephanie Lai

Date

NOV 14 2007

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PTO/SB/17 (10-07)

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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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Effective on 12/08/2004.  
Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).**FEE TRANSMITTAL**  
**For FY 2008**☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 0.00

**Complete if Known**

Application Number	10/605,250
Filing Date	09/17/2003
First Named Inventor	Tzu-Hung Cheng
Examiner Name	Smith, Jeffrey S
Art Unit	2624
Attorney Docket No.	PMXP0159USA

**METHOD OF PAYMENT (check all that apply)**

- ☐ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): \_\_\_\_\_
- ☒ Deposit Account Deposit Account Number: 50-3105 Deposit Account Name: North America Intellectual Property Corporation
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**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.****FEE CALCULATION****1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	310	155	510	255	210	105	
Design	210	105	100	50	130	65	
Plant	210	105	310	155	160	80	
Reissue	310	155	510	255	620	310	
Provisional	210	105	0	0	0	0	

**2. EXCESS CLAIM FEES****Fee Description**

Each claim over 20 (including Reissues)

Each independent claim over 3 (including Reissues)

Multiple dependent claims

Fee (\$)	Small Entity Fee (\$)
50	25
210	105
370	185

Total Claims	Extra Claims	Fee (\$)	Fees Paid (\$)
- 20 or HP =	x	=	
HP = highest number of total claims paid for, if greater than 20.			
Indep. Claims	Extra Claims	Fee (\$)	Fees Paid (\$)
- 3 or HP =	x	=	
HP = highest number of independent claims paid for, if greater than 3.			

Multiple Dependent Claims	
Fee (\$)	Fees Paid (\$)

**3. APPLICATION SIZE FEE**

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$260 (\$130 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fees Paid (\$)
- 100 =	/ 50 =	(round up to a whole number) x	=	

**4. OTHER FEE(S)**

Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): \_\_\_\_\_

**Fees Paid (\$)****SUBMITTED BY**

Signature	<i>Winston Hsu</i>	Registration No. (Attorney/Agent)	41,526	Telephone	3027291562
Name (Print/Type)	Winston Hsu			Date	NOV 14 2007

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent No. : US 7,283,680 B2  
Issue Date : Oct. 16, 2007  
Inventor : Tzu-Hung Cheng  
Docket No.: PMXP0159USA

Title: METHOD FOR IMAGE PROCESSING BY UNSHARP MASKING

To: Commissioner for Patents  
P.O. BOX 1450  
Alexandria, VA 22313-1450

Subject: Request for Certificate of Correction of Office  
Mistake

Dear Sir,

The application number of the Foreign Application Priority Data listed on the front page of the Patent is incorrect (Attachment 1). Documents on record indicate this as an Office mistake of consequence.

The applicant hereby requests that a Certificate of Correction be issued under 37 CFR 1.322 to correct the application number of the Foreign Application Priority Data from "03145390" to "03145390.2" which was correctly listed on the Filing Receipt dated 12/05/2003 (Attachment 2) and the Foreign Priority data showed on public PAIR (Attachment 3).

Respectfully submitted,

Winston Hsu

Date: NOV 14 2007

Winston Hsu, Patent Agent No. 41,526

P.O. BOX 506, Merrifield, VA 22116, U.S.A.

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Please correct the number of the Foreign Application Priority Data from "03145390" to "03145390.2"

Attachment 1



US007283680B2

(12) **United States Patent**  
**Cheng**

(10) **Patent No.:** **US 7,283,680 B2**  
(45) **Date of Patent:** **Oct. 16, 2007**

(54) **METHOD FOR IMAGE PROCESSING BY UNSHARP MASKING**

(75) **Inventor:** Tzu-Hung Cheng, Taipei (TW)

(73) **Assignee:** Primax Electronics Ltd., Neihu, Taipei (TW)

(\*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 869 days.

(21) **Appl. No.:** 10/605,250

(22) **Filed:** Sep. 17, 2003

(65) **Prior Publication Data**  
US 2005/0008249 A1 Jan. 13, 2005

(30) **Foreign Application Priority Data**

Jul. 7, 2003 (CN) 03 1 45390

(51) **Int. Cl.**  
G06K 9/40 (2006.01)  
H04N 5/21 (2006.01)

(52) **U.S. Cl.** 382/260; 382/266; 348/625

(58) **Field of Classification Search** 382/132, 382/260, 263, 264, 266; 348/625  
See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

5,038,388 A \* 8/1991 Song ..... 382/266  
5,189,511 A \* 2/1993 Parulski et al. .... 358/518  
5,231,677 A \* 7/1993 Mita et al. .... 382/266  
5,428,456 A \* 6/1995 Parulski et al. .... 386/124  
5,805,721 A \* 9/1998 Vuytsteke et al. .... 382/128

5,880,767 A \* 3/1999 Liu ..... 347/251  
5,912,715 A \* 6/1999 Hanai ..... 348/626  
6,005,983 A \* 12/1999 Anderson et al. .... 382/254  
6,411,305 B1 \* 6/2002 Chui ..... 345/660  
6,614,944 B1 \* 9/2003 Levantovsky ..... 382/261  
6,628,842 B1 \* 9/2003 Nagao ..... 382/266  
6,697,540 B1 \* 2/2004 Chen ..... 382/300  
6,788,824 B1 \* 9/2004 Prestia ..... 382/263  
6,965,702 B2 \* 11/2005 Gallagher ..... 382/266  
6,993,203 B2 \* 1/2006 Ozawa et al. .... 382/257  
2004/0176062 A1 \* 9/2004 Hsieh ..... 455/221  
2006/0039622 A1 \* 2/2006 Casale et al. .... 382/266  
2007/0009145 A1 \* 1/2007 Winsor et al. .... 382/132

\* cited by examiner

*Primary Examiner*—Jingge Wu

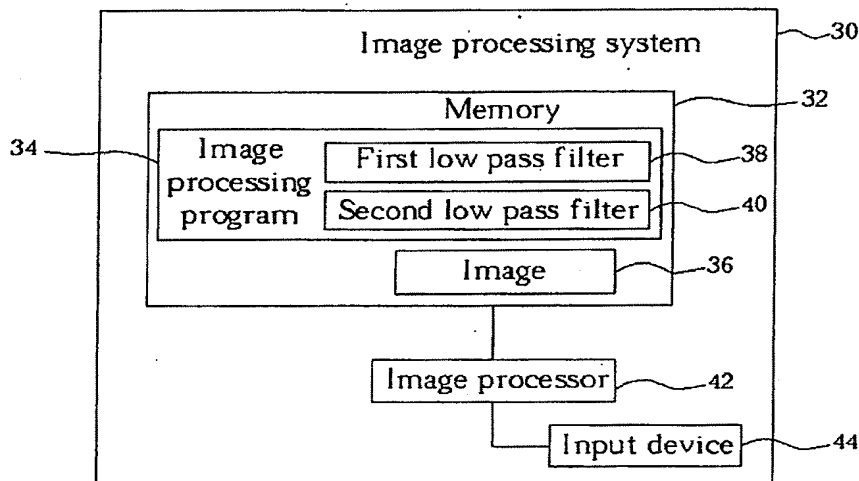
*Assistant Examiner*—Jeffrey S Smith

(74) *Attorney, Agent, or Firm*—Winston Hsu

(57) **ABSTRACT**

A method for adjusting an image signal by a processor includes providing a first low pass filter and a second low pass filter, generating an energy ratio of a band-pass image signal and the image signal according to the standard deviation of a first low pass signal of the first low pass filter and a second low pass signal of the second low pass filter, providing an image adjustment parameter and generating a weighting coefficient of the image signal according to the energy ratio and the image adjustment parameter, generating a third low pass filter according to the weighting coefficient of the image signal, the image adjustment parameter, the first low pass signal of the first low pass filter and the second low pass signal of the second low pass filter, and adjusting the image signal according to the image signal and the third low pass filter.

20 Claims, 7 Drawing Sheets



## Attachment 2

Page 1 of 2



## UNITED STATES PATENT AND TRADEMARK OFFICE

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Alexandria, Virginia 22313-1450  
www.uspto.gov

APPL NO.	FILING OR 371 (c) DATE	ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	DRAWINGS	TOT CLMS	IND CLMS
10/605,250	09/17/2003	2614	750	PMXP0159USA	7	20	2

CONFIRMATION NO. 2249

027765  
NAIPO (NORTH AMERICA INTERNATIONAL PATENT OFFICE)  
P.O. BOX 506  
MERRIFIELD, VA 22116

## FILING RECEIPT



\*OC000000011426928\*

Date Mailed: 12/05/2003

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Filing Receipt Corrections, facsimile number 703-746-9195. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

## Applicant(s)

Tzu-Hung Cheng, Taipei City, TAIWAN;

T. 致伸 萬宗泰 先生

## Domestic Priority data as claimed by applicant

US I 1272

## Foreign Applications

CHINA 03145390.2 07/07/2003

Filing Receipt 1頁!

If Required, Foreign Filing License Granted: 12/04/2003

Projected Publication Date: 01/13/2005

from 永美 高千惠

Non-Publication Request: No

2003/12/24

Early Publication Request: No

## Title

METHOD FOR IMAGE PROCESSING BY UNSHARP MASKING

## Preliminary Class

348



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Title 37, Code of Federal Regulations, 5.11 & 5.15**

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10/605,250	METHOD FOR IMAGE PROCESSING BY UNSHARP MASKING	11-01- 2007::23:01:14
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**Foreign Priority**

Country	Priority	Priority Date
CHINA	03145390.2	07-07-2003

Close Window

**UNITED STATES PATENT AND TRADEMARK OFFICE  
CERTIFICATE OF CORRECTION**

Page 1 of 1

PATENT NO. : US 7,283,680 B2

APPLICATION NO.: 10/605,250

ISSUE DATE : Oct. 16, 2007

INVENTOR(S) : Tzu-Hung Cheng

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On the title page, item (30), correct the application number of the Foreign Application Priority Data from "03145390" to "03145390.2"

MAILING ADDRESS OF SENDER (Please do not use customer number below):

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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10/605,250 METHOD FOR IMAGE PROCESSING BY UNSHARP MASKING

08-19-  
2008::05:35:20

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**Available Documents**

Mail Room Date	Document Code	Document Description	Page Count
11-16-2007	COCIN	Request for Certificate of Correction	9
09-26-2007	ISSUE.NTF	Issue Notification	1
08-22-2007	FWCLM	Index of Claims	1
07-26-2007	IFEE	Issue Fee Payment (PTO-85B)	2
07-17-2007	NOA	Notice of Allowance and Fees Due (PTOL-85)	3
07-17-2007	NOA	Notice of Allowance and Fees Due (PTOL-85)	2
07-17-2007	892	List of references cited by examiner	1
07-17-2007	IIFW	Issue Information including classification, examiner, name, claim, renumbering, etc.	1
07-17-2007	FWCLM	Index of Claims	1
07-17-2007	SRFW	Search information including classification, databases and other search related notes	1
07-09-2007	SRNT	Examiner's search strategy and results	4
06-20-2007	A...	Amendment - After Non-Final Rejection	4
06-20-2007	SPEC	Specification	11
06-20-2007	ABST	Abstract	1
06-20-2007	CLM	Claims	5
06-20-2007	REM	Applicant Arguments/Remarks Made in an Amendment	10
06-20-2007	DRW	Drawings-only black and white line drawings	4
06-20-2007	WFEE	Fee Worksheet (PTO-06)	1
04-05-2007	CTNF	Non-Final Rejection	10
04-05-2007	892	List of references cited by examiner	1
04-05-2007	FWCLM	Index of Claims	1
04-05-2007	BIB	Bibliographic Data Sheet	1
04-05-2007	SRFW	Search information including classification, databases and other search related notes	1
03-30-2007	SRNT	Examiner's search strategy and results	8
02-22-2007	SRNT	Examiner's search strategy and results	1
07-22-2004	PETDEC	Petition Decision	1
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09-24-2003	FRPR	Certified Copy of Foreign Priority Application	21
09-24-2003	WFEE	Fee Worksheet (PTO-06)	1
09-17-2003	OATH	Oath or Declaration filed	3
09-17-2003	WFEE	Fee Worksheet (PTO-06)	2
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09-17-2003	CLM	Claims	10
09-17-2003	ABST	Abstract	1
09-17-2003	DRW	Drawings-only black and white line drawings	7
09-17-2003	N417	EFS Acknowledgment Receipt	3

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